10/565 434

WEST Search History

Hide Items | Restore | Clear | Cancel

DATE: Monday, June 26, 2006

Hide?	Set Name	Query	Hit Count
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=OR		
☐	L17	L15 and catechin.clm.	2
☐	L16	L15 with catechin.clm.	0
☐	L15	((reduced or oxidized or oxidised) adj1 glutathione).clm.	295
☐	L14	L13.clm.	0
☐	L13	L11 with catechin	42
☐	L12	L11.clm.	295
☐	L11	(reduced or oxidized or oxidised) adj1 glutathione	4369
	DB=PGPB,USPT,USOC; PLUR=YES; OP=OR		
☐	L10	6013632.pn.	1
☐	L9	6107281.pn.	1
☐	L8	L7 and (glutathione with catechin).clm.	9
☐	L7	(514/18)[CCLS]	2041
☐	L6	(514/18)![CCLS]	2041
	DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=OR		
☐	L5	(treatment or administ$).clm. and L3	17
☐	L4	(treatment or administ$) and L3	20
☐	L3	(virus or viral or coronavirus or flavivirus) and L2	20
☐	L2	catechin.clm. and L1	58
☐	L1	glutathione.clm.	2433

END OF SEARCH HISTORY

10/565,434

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FILE 'HOME' ENTERED AT 14:57:05 ON 26 JUN 2006

=> b caplus biosis scisearch medline
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                                 2.31       2.31

FILE 'CAPLUS' ENTERED AT 15:03:21 ON 26 JUN 2006
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FILE 'BIOSIS' ENTERED AT 15:03:21 ON 26 JUN 2006
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FILE 'SCISEARCH' ENTERED AT 15:03:21 ON 26 JUN 2006
Copyright (c) 2006 The Thomson Corporation

FILE 'MEDLINE' ENTERED AT 15:03:21 ON 26 JUN 2006

=> s glutathione and catechin
L1          627 GLUTATHIONE AND CATECHIN

=> s glutathione(P)catechin
L2          442 GLUTATHIONE(P) CATECHIN

=> s l2 and (virus or viral)
L3            8 L2 AND (VIRUS OR VIRAL)

=> dup remo l3
PROCESSING COMPLETED FOR L3
L4            5 DUP REMO L3 (3 DUPLICATES REMOVED)

=> d l4 1-5 bib abs

L4   ANSWER 1 OF 5  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2005:74109  CAPLUS
DN   142:170027
TI   Preventive or therapeutic composition containing glutathione
     and/or catechin for viral infectious disease
IN   Furukawa, Satoru; Kawabe, Hideo; Ohori, Hitoshi; Mukai, Takao; Matsumoto,
     Mitsuyo
PA   Kyowa Hakko Kogyo Co., Ltd., Japan
SO   PCT Int. Appl., 32 pp.
     CODEN: PIXXD2
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     ---------------     ----   --------    -------------------     --------
PI   WO 2005007640       A1     20050127    WO 2004-JP10765         20040722
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
     EP 1655292          A1     20060510    EP 2004-748030          20040722
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
PRAI JP 2003-199593      A      20030722
     JP 2004-93952       A      20040329
     WO 2004-JP10765     W      20040722
```

AB A preventive or therapeutic composition for **viral** infectious diseases due to **virus** belonging to the Coronaviridae family or Flaviviridae family comprises at least one substance selected from among reduced **glutathione**, oxidized **glutathione**, pharmaceutically acceptable salts thereof, and **catechin**. Also claimed is a preventive or therapeutic composition for **viral** infectious diseases due to **virus** belonging to the Coronaviridae family or Flaviviridae family comprising reduced or oxidized **glutathione**, or a pharmaceutically acceptable salt thereof, and **catechin**. The antiviral activities of reduced **glutathione** and of **catechin** (EGCG) were demonstrated. A composition for nasal administration contained reduced **glutathione** 1 g, sodium acetate 0.3 g, methylparaben 0.1 g, propylparaben 0.02 g, sodium chloride (appropriate amount), HCl or NaOH (amount needed for adjustment of pH), and water to 100 mL.

RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 5 MEDLINE on STN
AN 2005277513 MEDLINE
DN PubMed ID: 15921026
TI Animal models and analytical approaches for understanding the relationships between wine and cancer.
AU Ebeler S E; Dingley K H; Ubick E; Abel S; Mitchell A E; Burns S A; Steinberg F M; Clifford A J
CS Department of Viticulture and Enology, University of California, Davis, CA 95616, USA.. seebeler@ucdavis.edu
NC DK45939 (NIDDK)
P30 DK35747 (NIDDK)
RR13461 (NCRR)
SO Drugs under experimental and clinical research, (2005) Vol. 31, No. 1, pp. 19-27.
Journal code: 7802135. ISSN: 0378-6501.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200509
ED Entered STN: 31 May 2005
Last Updated on STN: 20 Sep 2005
Entered Medline: 19 Sep 2005
AB We used two approaches for studying the relationships between wine consumption, wine composition and cancer In the first approach, a transgenic mouse model of human neurofibromatosis, combined with the use of well-defined, chemically purified diets, showed that red wine contains nonalcoholic components that can delay tumor onset. In additional studies, **catechin**, the main monomeric polyphenol of red wine, delayed tumor onset in this mouse model in a positive, linear relationship when incorporated into the diet at levels of 0.5-4 mmol/kg diet. In the second approach, low doses of the chemical carcinogen 2-amino-1-methyl-6-phenylimidazo(4, 5-b)pyridine (PhIP) were administered to rats, and formation of DNA adducts was evaluated by accelerator mass spectrometry. Consumption of red wine solids (the residue from red wine remaining after removal of alcohol and water) and the wine polyphenol quercetin did not influence PhIP-DNA adduct levels or induce liver enzymes (**glutathione**-S-transferase and quinone reductase). However, quercetin did alter distribution of PhIP in the rat tissues compared to control animals and animals fed other potential dietary chemopreventive agents, including phenylethyl isothiocyanate and sulforaphane. These studies demonstrate the feasibility of these approaches for studying the chemopreventive potential of dietary components at physiologic levels in

L4 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:633154 CAPLUS
DN 141:167729
TI Gastrointestinal glutathione peroxidase as therapeutic target for treatment of HCV infection, methods of treating HCV infection, and compounds useful therefor
IN Herget, Thomas; Cotten, Matthew; Obert, Sabine; Klebl, Bert

PA Germany
SO U.S. Pat. Appl. Publ., 24 pp., Cont.-in-part of U.S. Pat. Appl. 2003 180,719.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004152073	A1	20040805	US 2003-723719	20031126
	WO 2002084294	A2	20021024	WO 2002-EP4167	20020415
	WO 2002084294	A3	20031030		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	DE 10255861	A1	20040617	DE 2002-10255861	20021129
	US 2003180719	A1	20030925	US 2003-342054	20030114
PRAI	US 2001-283345P	P	20010413		
	WO 2002-EP4167	A2	20020415		
	DE 2002-10255861	A	20021129		
	US 2002-430367P	P	20021203		
	US 2003-342054	A2	20030114		

AB The present invention relates to the human cellular protein glutathione peroxidase-gastrointestinal as a target for medical intervention against Hepatitis C **virus** (HCV) infections. Furthermore, the present invention relates to a method for the detection of compds. useful for prophylaxis and/or treatment of hepatitis C **virus** infections and a method for detecting hepatitis C **virus** infections in an individual or in cells. Also compns., compds., nucleic acid mols. (such as aptamers), mono- or polyclonal antibodies are disclosed which are effective for the treatment of HCV infections, and methods for prophylaxis and/or treatment of hepatitis C **virus** infections or for the regulation of hepatitis C **virus** production are disclosed. The inventors designed a randomized, single-blinded clin. study to test the safety, tolerability, and efficacy of all-trans retinoic acid alone or in combination with pegylated α interferon in patients with chronic hepatitis C. The therapy regimens include: Vesanoid (orally administered all-trans retinoic acid compound, Hoffman-La Roche); Pegasys (slow-release pegylated interferon α2a, Hoffman-La Roche); and selen 30 ALLACT (supplement containing selenium and ALLACT composed of garlic powder and Lactobacillus bulgaricus).

L4 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2003:757185 CAPLUS
DN 139:271014
TI Human cellular protein gastrointestinal glutathione peroxidase as target for medical intervention against hepatitis C **virus** infections
IN Herget, Thomas; Cotten, Matthew; Obert, Sabine
PA Germany
SO U.S. Pat. Appl. Publ., 23 pp., Cont.-in-part of Appl. No. PCT/EP02/04167.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003180719	A1	20030925	US 2003-342054	20030114
	WO 2002084294	A2	20021024	WO 2002-EP4167	20020415
	WO 2002084294	A3	20031030		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	DE 10255861	A1	20040617	DE 2002-10255861	20021129
	US 2004152073	A1	20040805	US 2003-723719	20031126
PRAI	US 2001-283345P	P	20010413		
	WO 2002-EP4167	A2	20020415		
	DE 2002-10255861	A	20021129		
	US 2002-430367P	P	20021203		
	US 2003-342054	A2	20030114		

AB The present invention relates to the human cellular protein glutathione peroxidase-gastrointestinal as a target for medical intervention against Hepatitis C **virus** (HCV) infections. Furthermore, the present invention relates to a method for the detection of compds. useful for prophylaxis and/or treatment of Hepatitis C **virus** infections and a method for detecting Hepatitis C **virus** infections in an individual or in cells. Also compns., compds., nucleic acid mols. (such as aptamers), mono- or polyclonal antibodies are disclosed which are effective for the treatment of HCV infections, and methods for prophylaxis and/or treatment of Hepatitis C **virus** infections or for the regulation of Hepatitis C **virus** production are disclosed.

L4 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1
AN 1998:587997 CAPLUS
DN 129:298362
TI Inactivation and toxoiding of biologically-active components of Bordetella pertussis by tea catechins
AU Watanabe, Mineo; Endoh, Masahiko; Takeo, Tadakazu
CS Dep. Microbiol. Biologics, Daiichi Coll. Pharmaceutical Sciences, Fukuoka, 815-8511, Japan
SO Yakugaku Zasshi (1998), 118(9), 415-422
CODEN: YKKZAJ; ISSN: 0031-6903
PB Pharmaceutical Society of Japan
DT Journal
LA Japanese
AB An ability of tea **catechins** known as agents for the disinfection to bacteria and **viruses** were tested on application for toxoiding biol.-active components of Bordetella pertussis. The effects on the activities and antigenicity of filamentous hemagglutinin (FHA) and pertussis toxin (PT) were investigated. The activities of FHA and PT were inactivated by **catechins** at approx. 103 times lower dose (0.2 mM) compared with that of formalin. The activity of inactivated FHA was recovered by dialysis against Tris-HCl buffer, pH 8.0, containing **glutathione** or Tris-HCl buffer, pH 6.0. But the activity of inactivated PT was not recovered. Antigenicity of **catechin** -treated antigens were investigated by immunization to mice. The sera from mice immunized by **catechin**-treated FHA or PT were contained antibody against not only **catechin**-treated but also non-treated FHA or PT. These results suggest that antigenicity of FHA or PT was not destroyed by the treatment with **catechin**. We prepared pertussis-component vaccines by treatment of several **catechins** on the condition that FHA or PT activity was not recovered. Higher efficacy was found in the vaccines made by treatment of epicatechin, epicatechin gallate, or epigallocatechin than those by formalin. The vaccine prepared by using epigallocatechin gallate had significant efficacy as good as the formalin treated one. From these results, it is suggested that tea leaf **catechins** were effective agents for toxoiding of vaccine components.

=> d his

(FILE 'HOME' ENTERED AT 14:57:05 ON 26 JUN 2006)

FILE 'CAPLUS, BIOSIS, SCISEARCH, MEDLINE' ENTERED AT 15:03:21 ON 26 JUN

2006
L1 627 S GLUTATHIONE AND CATECHIN
L2 442 S GLUTATHIONE(P)CATECHIN
L3 8 S L2 AND (VIRUS OR VIRAL)
L4 5 DUP REMO L3 (3 DUPLICATES REMOVED)

=> s l2(P)composition
L5 10 L2(P) COMPOSITION

=> dup remo l5
PROCESSING COMPLETED FOR L5
L6 6 DUP REMO L5 (4 DUPLICATES REMOVED)

=> d l6 1-6 bib abs

L6 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:74109 CAPLUS
DN 142:170027
TI Preventive or therapeutic **composition** containing **glutathione** and/or **catechin** for viral infectious disease
IN Furukawa, Satoru; Kawabe, Hideo; Ohori, Hitoshi; Mukai, Takao; Matsumoto, Mitsuyo
PA Kyowa Hakko Kogyo Co., Ltd., Japan
SO PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005007640	A1	20050127	WO 2004-JP10765	20040722
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1655292	A1	20060510	EP 2004-748030	20040722
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
PRAI	JP 2003-199593	A	20030722		
	JP 2004-93952	A	20040329		
	WO 2004-JP10765	W	20040722		

AB A preventive or therapeutic **compn.** for viral infectious diseases due to virus belonging to the Coronaviridae family or Flaviviridae family comprises at least one substance selected from among reduced **glutathione**, oxidized **glutathione**, pharmaceutically acceptable salts thereof, and **catechin**. Also claimed is a preventive or therapeutic **compn.** for viral infectious diseases due to virus belonging to the Coronaviridae family or Flaviviridae family comprising reduced or oxidized **glutathione**, or a pharmaceutically acceptable salt thereof, and **catechin**. The antiviral activities of reduced **glutathione** and of **catechin** (EGCG) were demonstrated. A **compn.** for nasal administration contained reduced **glutathione** 1 g, sodium acetate 0.3 g, methylparaben 0.1 g, propylparaben 0.02 g, sodium chloride (appropriate amount), HCl or NaOH (amount needed for adjustment of pH), and water to 100 mL.
RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1
AN 2005:451874 CAPLUS
DN 143:193178
TI Animal models and analytical approaches for understanding the relationships between wine and cancer
AU Ebeler, S. E.; Dingley, K. H.; Ubick, E.; Abel, S.; Mitchell, A. E.; Burns, S. A.; Steinberg, F. M.; Clifford, A. J.
CS Department of Viticulture and Enology, University of California, Davis, CA, USA
SO Drugs under Experimental and Clinical Research (2005), 31(1), 19-27
CODEN: DECRDP; ISSN: 0378-6501
PB Bioscience Ediprint Inc.
DT Journal
LA English
AB We used two approaches for studying the relationships between wine consumption, wine **compn.** and cancer. In the first approach, a transgenic mouse model of human neurofibromatosis, combined with the use of well-defined, chemical purified diets, showed that red wine contains nonalcoholic components that can delay tumor onset. In addnl. studies, **catechin**, the main monomeric polyphenol of red wine, delayed tumor onset in this mouse model in a pos., linear relationship when incorporated into the diet at levels of 0.5-4 mmol/kg diet. In the second approach, low doses of the chemical carcinogen 2-amino-1-methyl-6-phenylimidazo(4,5-b)pyridine (PhIP) were administered to rats, and formation of DNA adducts was evaluated by accelerator mass spectrometry. Consumption of red wine solids (the residue from red wine remaining after removal of alc. and water) and the wine polyphenol quercetin did not influence PhIP-DNA adduct levels or induce liver enzymes (**glutathione**-S-transferase and quinone reductase). However, quercetin did alter distribution of PhIP in the rat tissues compared to control animals and animals fed other potential dietary chemopreventive agents, including phenylethyl isothiocyanate and sulforaphane. These studies demonstrate the feasibility of these approaches for studying the chemopreventive potential of dietary components at physiol. levels in vivo.
RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:993351 CAPLUS
DN 141:427672
TI Antioxidant composition for alkali ion water
IN Sanba, Nobuhiko; Ito, Shinobu
PA Japan
SO Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004323815	A2	20041118	JP 2003-153526	20030423
PRAI	JP 2003-153526		20030423		

AB The title **compn.** comprises ≥1 pH neutralizers capable of inhibiting and scavenging free radicals and active oxygen from superoxides, H2O2, NO, hydroperoxides and etc. The pH neutralizers are preferably ascorbic acid or its derivs., α-tocopherol, **glutathione**, **Catechin**, or Tocopherol phosphate. The alkali ion water has a controlled pH of 5-9, preferably 6-8 and redox potential at +250 to -1000, preferably -200 to -800 for inhibiting the occurrence of active oxygen and free radicals by utilizing the antioxidant **compn.**

L6 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2002:406589 CAPLUS
DN 137:19883
TI Does coffee drinking influence plasma antioxidant capacity?
AU Natella, F.; Scaccini, C.
CS Free Radical Research Group, INRAN, Rome, 00178, Italy
SO Colloque Scientifique International sur le Cafe (2001), 19th, 17-22
CODEN: CICRD8
PB Association Scientifique Internationale du Cafe
DT Journal; (computer optical disk)

LA English
AB Bioavailability, intestinal absorption, and metabolic fate of dietary plant constituents, such as flavonoids and related polyphenols, important for antioxidant protection in humans are still not fully explained. The definition plant phenols includes thousands of compds. with different chemical structures and different antioxidant activities. As the chemical structure is an important determinant for bioavailability, the profile of phenolic compds. in blood plasma can be quite different from that in the original dietary source due to metabolism and biotransformation. Beverages made from plants (white and red wine, green and black tea, beer) were tested for their in vitro and in vivo antioxidant activity. The capacity of a food to transfer its antioxidant activity was linked to several know and unknown chemical, biochem., and physiol. characteristics. The effects of food phenols on the in vivo redox balance cannot be determined by a simple extrapolation of the in vitro activity. Coffee contains several phenolic components, besides tocopherols, with antioxidant capacity: chlorogenic acids (esters of cinnamic acids with quinic acid), and free caffeic, ferulic and p-coumaric acids. Black tea contains **catechins**, thearubigins and theaflavins, which are oxidation products of **catechins** formed during enzymic oxidation by polyphenol oxidase in fresh tea leaves. The capacity of coffee to affect the blood plasma redox homeostasis was evaluated in humans, using tea as a pos. control. In two different sessions, 200-mL doses of brewed coffee or black tea were given under fasting conditions to 10 healthy non-smoker moderate coffee drinkers within 10 min from brewing. Blood plasma collected at 0, 1, and 2 h after coffee/tea intake was analyzed for uric acid, α-tocopherol, and **glutathione** (reduced and oxidized). The total antioxidant capacity was determined by measuring the competition with the bleaching of 2 target mols. (r-phycoerythrin and crocin) triggered by peroxyl radicals generated by thermal decomposition of 2,2'-azobis(2-aminopropane) dihydrochloride (AAPH). Bolus ingestion of 200 mL coffee led to 5.5% increase in plasma total antioxidant capacity (r-phycoerythrin test) at 1 h, maintaining a 4% increase after 2 h. The average 4.7% increase at 1 h after tea ingestion did not reach statistical significance due to high variability in individual responses. The antioxidant capacity after coffee ingestion measured by the crocin test had a similar trend in the modulation of antioxidant activity, even when the differences were small. No effect of tea drinking was seen with the crocin test. The discrepancy of the 2 tests used may be due to the capacity of some mols. to affect plasma concns. of uric acid, coupled with different sensitivity of the 2 tests for uric acid. Only tea drinking increased blood plasma levels of uric acid, a component of the group of mols. with antioxidant activity contributing to the antioxidant capacity as measured by the r-phycoerythrin test, but not by the crocin test. The other parameters of the antioxidant status did not much change, except for significant increases in α-tocopherol levels 2 h after tea drinking. Thus, the increase of blood plasma antioxidant capacity (determined by crocin test) induced by coffee may be due to antioxidants derived from coffee, while in the case of tea the small increase may be due to increased uric acid levels. It is unclear why tea drinking increases uric acid levels, while coffee drinking does not. Phenolic **compn.** and quant. proportions of different phenolic classes may be responsible for this phenomenon.
RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 2
AN 1990:513765 CAPLUS
DN 113:113765
TI Effect of press design and pressing pressures on grape juice components
AU Yokotsuka, Koki
CS Inst. Enol. Vitic., Yamanashi Univ., Kofu, 400, Japan
SO Journal of Fermentation and Bioengineering (1990), 70(1), 15-21
CODEN: JFBIEX; ISSN: 0922-338X
DT Journal
LA English
AB Com.-sized presses were used to press destemmed and crushed Koshu grapes with stems at different pressures. It was found that the **compn.** of the juices was significantly affected by the type of press, pressing pressure, and presence or absence of stems. The free-run had the highest concentration of **glutathione** while pressing at moderate pressures yielded juice with very high concns. of proteins and polyphenoloxidase (PPO). On the other hand, maximum concns. of phenols including caffeΣyl tartrate (caftaric acid), 2-S-glutathionyl caftaric acid (GRP), **catechin** and epicatechin were found in juices from high pressure pressing. The low concentration of **glutathione**, when compared to the amts. of caftaric acid and PPO, is one of the major reasons why Koshu juice is very susceptible to browning.

L6 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1983:14897 CAPLUS
DN 98:14897
TI Effects of dithiocarb and (+)-catechin on the glutathione-conjugating system in rat liver cytosol in vivo and in vitro
AU Younes, M.; Larseille, J.; Siegers, C. P.
CS Inst. Toxikol., Med. Hochsch. Luebeck, Luebeck, D-2400, Fed. Rep. Ger.
SO Pharmacological Research Communications (1982), 14(9), 779-88
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LA English
AB The effects of (+)-catechin and dithiocarb on the glutathione-conjugating system of rat liver were investigated after a single dose as well as after repeated treatment for 7 and 28 days. The hepatic levels of GSH remained unaffected in all cases. Both agents exerted a significant reduction of the glutathione S-transferase activity towards an epoxide substrate [1,2-epoxy-3-(p-nitrophenoxy)propane] following the application of a single dose (200 mg/kg, per os). A 7-day treatment with either agent had no effect, whereas the treatment for 28 days evoked a dose-dependent inhibition of the epoxide transferase activity. The GSH S-transferase activity towards an aryl substrate (1-chloro-2,4-dinitrobenzene) was depressed after treatment with (+)-catechin for 7 days or 4 wk. In vitro studies revealed for the aryl transferase activity an inhibition by dithiocarb of the competitive type with respect to GSH and of the noncompetitive type with respect to chlorodinitrobenzene. Mixed-type inhibition was found with (+)-catechin with respect to either substrate. As for the epoxide transferase activity, dithiocarb exerted a mixed-type inhibition with respect to GSH and a competitive type inhibition with respect to epoxy(nitrophenoxy)propane. (+)-Catechin was inhibitory only with respect to GSH, giving rise to a noncompetitive type inhibition. Apparent KI values were 0.3-1 mM.

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(FILE 'HOME' ENTERED AT 14:57:05 ON 26 JUN 2006)

FILE 'CAPLUS, BIOSIS, SCISEARCH, MEDLINE' ENTERED AT 15:03:21 ON 26 JUN 2006
L1 627 S GLUTATHIONE AND CATECHIN
L2 442 S GLUTATHIONE(P)CATECHIN
L3 8 S L2 AND (VIRUS OR VIRAL)
L4 5 DUP REMO L3 (3 DUPLICATES REMOVED)
L5 10 S L2(P)COMPOSITION
L6 6 DUP REMO L5 (4 DUPLICATES REMOVED)